Memorandum

U.S. Department of Transportation

Federal Aviation Administration

Subject: INFORMATION: Policy Statement and Equivalent

Safety Finding on No Smoking Placards and Signs

Date: July 7, 2003

From: Acting Manager, Transport Airplane Directorate,

Aircraft Certification Service, ANM-100

Reply to Attn. ANM-03-115-05

of:

To: See Distribution Regulatory §§ 25.853 and

Reference: 25.791

Summary

The purpose of this memorandum is to provide Federal Aviation Administration (FAA) certification policy on placards and signs that prohibit smoking. Additionally, this memorandum documents a finding of equivalent safety when the FAA finds that specific criteria are met.

Current Regulatory and Advisory Material

Part 25 at Amendment 25-0 states the following:

§ 25.853(c). Each compartment where smoking is to be allowed must have self-contained, removable, ashtrays, and each other compartment must be placarded against smoking.

Part 25 at Amendment 25-32 states the following:

§ 25.853(c). Each compartment where smoking is to be allowed must have self-contained, removable, ashtrays, and each other compartment must be placarded against smoking.

§ 25.791. When passenger information signs are installed to comply with the operating rules of this chapter, at least one sign (using either letters or symbols) notifying when smoking is prohibited and one sign (using either letters or symbols) notifying when safety belts should be fastened must, when illuminated, be legible to each person seated in the passenger cabin under all probable conditions of cabin illumination. Signs which notify when safety belts should be fastened and when smoking is prohibited must be so constructed that the crew can turn them on and off.

Part 25 at Amendment 25-51 states the following:

§ 25.853(c). If smoking is to be prohibited, there must be a placard so stating, and if smoking is to be allowed....

§ 25.791. When passenger information signs are installed to comply with the operating rules of this chapter, at least one sign (using either letters or symbols) notifying when smoking is prohibited and one sign (using either letters or symbols) notifying when safety belts should be fastened must, when illuminated, be legible to each person seated in the passenger cabin under all probable conditions of cabin illumination. Signs which notify when safety belts should be fastened and when smoking is prohibited must be so constructed that the crew can turn them on and off.

Part 25 at Amendment 25-72 states the following:

§ 25.791(a). If smoking is to be prohibited, there must be at least one placard so stating that is legible to each person seated in the cabin. If smoking is to be allowed, and if the crew compartment is separated from the passenger compartment, there must be at least one sign notifying when smoking is prohibited. Signs which notify when smoking is prohibited must be operable by a member of the flightcrew and, when illuminated, must be legible under all probable conditions of cabin illumination to each person seated in the cabin.

(b) Signs that notify when seat belts should be fastened and that are installed to comply with the operating rules of this chapter must be operable by a member of the flightcrew and, when illuminated, must be legible under all probable conditions of cabin illumination to each person seated in the cabin.

Policy

The following policy is intended to support the equivalent safety finding discussed below which allows signs that prohibit smoking to not be operable by the crew (Amendment 25-32)/flightcrew (Amendment 25-72).

Section 25.791(a) requires that at least one "No Smoking" placard be legible to each occupant seated in compartments where smoking is prohibited. These placards act as continuous reminders to the occupants that smoking is prohibited. Manufactures have previously requested that lighted "No Smoking" signs be used to meet this requirement. The FAA finds that a lighted sign can be considered a placard if it is continuously illuminated for the occupants. Lighted signs that are used as placards should illuminate without the cockpit or cabin crew having to turn the signs on. This can be accomplished by "hardwiring" the signs such that the signs are illuminated whenever the airplane's normal electric power is on or by providing equivalent control of the signs by software. Note that "hardwiring" should be accomplished in accordance with the applicable regulations and policies including § 25.1357. Hardwiring should not violate the design and performance requirements (temperature, duty cycle, etc.) of the components (wire, fixture, circuit breaker, etc.) used in the lighted signs. Appropriate mechanisms such as switches should be available to the crew to safely remove the power from the lighted

signs during fault conditions without jeopardizing operation of other essential loads or relying on pulling circuit breakers.

This policy is also applicable to the "No Smoking" placard requirements in § 25.853(c) at Amendments 25-0 and 25-51.

Effect of Policy

The general policy stated in this document does not constitute a new regulation or create what the courts refer to as a "binding norm." The office that implements policy should follow this policy when applicable to the specific project. Whenever an applicant's proposed method of compliance is outside this established policy, it should be coordinated with the policy issuing office, e.g., through the issue paper process or equivalent. Similarly, although this policy is not binding on the FAA, if the implementing office becomes aware of reasons that an applicant's proposal that meets this policy should not be approved, the office must coordinate its response with the policy issuing office.

Applicants should expect that the certificating officials will consider this information when making findings of compliance relevant to new certificate actions. Also, as with all advisory material, this policy statement identifies one means, but not the only means, of compliance.

Equivalent Safety Finding (ESF)

Regulations Requiring an ESF

Section 25.791 at Amendment 25-32, and § 25.791(a) at Amendment 25-72.

<u>Description of Compensating Design Features or Alternative Standards Which Allow the Granting of an ESF (including design changes, limitations or equipment needed for equivalency)</u>

Section 25.791 requires that "No Smoking" signs be constructed so that a member of the crew (Amendment 25-32)/flightcrew (Amendment 25-72) can turn them on or off. For compartments where smoking is prohibited, the FAA finds that an equivalent level of safety to this requirement is provided when the "No Smoking" signs are automatically and continuously turned on during flight operations. This can be accomplished by either "hardwiring" the signs such that the signs are illuminated whenever the airplane's normal electric power is on or by providing equivalent control of the signs by software. Note, that this finding is not applicable to airplane operational regulations (i.e., §§ 121.317(a), 125.217(a)) which require these signs to be constructed so that crew can turn them on or off. Applicants who operate in 14 CFR parts 121 and 125 service and elect to have the signs on continuously, through the means noted above, would need to obtain approval to operate in this particular configuration from their Certificate Management Organization or applicable Flight Standards District Office.

Explanation of How Design Features or Alternative Standards Provide an Equivalent Level of Safety to the Level of Safety Intended by the Regulation

Section 25.791 requires that "No Smoking" signs be constructed so that a member of the crew (Amendment 25-32)/flightcrew (Amendment 25-72) can turn them on or off. For a compartment where smoking is prohibited, the "No Smoking" signs would be continually illuminated to inform occupants of this prohibition and would not be turned off. Hence, the FAA finds that an equivalent level of safety to § 25.791 is provided for compartments where smoking is prohibited when the signs are continuously illuminated as described in the section above.

Documentation of ESF

This memorandum provides standardized documentation of an ESF to the § 25.791 requirement for "No Smoking" signs to be constructed so that a member of the crew (Amendment 25-32)/flightcrew (Amendment 25-72) can turn them on or off. This memorandum does not contain proprietary information and may be made available to the public. The Transport Airplane Directorate assigned memorandum number (see front page) will be used by the FAA to facilitate archiving and retrieval of this ESF. Applicants that utilize this ESF should list this memorandum number in the Type Certificate Data Sheet under the Certification Basis section or on the Supplemental Type Certificate in the Limitations and Conditions section. An example of appropriate wording is as follows:

Equivalent Safety Findings have been made for the following regulations: § 25.791 No Smoking Signs (documented in FAA Memorandum No. ANM-03-115-05)

/s/

Ali Bahrami